



## **WATER RESOURCES RESEARCH GRANT PROPOSAL**

**Project ID:** TX3161

**Title:** Arsenic Concentrations in Water Resources of the Choke Canyon/Lake Corpus Christi Reservoir Systems: Surface and Ground Waters

**Focus Categories:** Surface Water, Radioactive Substances

**Keywords:** Uranium Mining, Trace Metals, Nueces River Basin, Arsenic

**Start Date:** 03/01/2001

**End Date:** 02/28/2002

**Federal Funds:** \$5,000

**Non-Federal Matching Funds:** \$12,651

**Congressional District:** 27

**Principal Investigator:**

Jill Brandenberger

Student, Auburn University

**Abstract**

The goals of this study are to assess the extent to which arsenic and other heavy metals are cycled throughout surface waters of the Corpus Christi, Texas, region, as well as the fate of these pollutants. In the project, temporal and spatial modeling of trace element levels will be conducted in the waters of Lake Corpus Christi, Choke Canyon Reservoir, and along the Nueces, Atascosa, and Frio rivers. Surface water samples will be collected throughout 2001 and analyzed using Inductively Coupled Mass Spectrometry. The project should be especially useful, since it will provide data to regulators about how the spatial and temporal cycling of trace metals in freshwater resources may affect drinking water supplies. The project will also develop a database that can build the framework for assessing non-point pollution sources in the region.